CIW Objectives Mapping to IDOE – Business, Marketing, & IT
Web Design
Code Number 4574

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WD 1 History/Background of Internet and WWW	
WD 1.1.1 Identify key events in the history of the WWW, Internet and Intranet	**1.2.2:** Explain Internet history and define current protocols, including: IPv4, IPv6, related protocols. **1.2** Identify the infrastructure required to access the Internet, including hardware and software components. **2.1.1** Relate the history of markup languages to current techniques and technologies, including Standard Generalized Markup Language (SGML), previous versions of Hypertext Markup Language (HTML).
WD 1.1.2 Analyze the affect of the Internet on society	**1.1.1** Individual IT job roles
WD 1.1.3 Compare and contrast the different modes of accessing information via the Internet	**1.2.3** Internet client infrastructure **1.2.4** Hardware and software connection devices.
WD 1.1.4 Define Internet terminology	**1.2:** Identify the infrastructure required to access the Internet, including hardware and software components. **1.3:** Define important Internet communications protocols and their roles in delivering basic Internet services.
WD 1.1.5 Recognize files types and file extensions such as html, htm, com, gov, org, pdf, zip, txt, jpg, gif, bmp, wav, mp3, midi, wma, url	**2.10.1** Identify the uses and benefits of various document and multimedia file formats, including pdf, rtf, postscript, eps, mov, mpeg, streaming media, non-streaming media.
WD 1.1.6 Create and manage proper folder structure	**2.6.1** Define the functionality of XML
WD 2 Planning, Developing, and Maintaining a Web Site	
WD 2.1.1 Create a plan for a Web site having at least two levels and translate it into a site map	**2.7.2** Create an initial Web site diagram (i.e., a story board or prototype), and translate into a site map.
WD 2.1.2 Explain and demonstrate the principles of good Web page design.	**2.3** Identify and use design and color principles for Web pages.
WD 2.1.3 Determine the purpose and target audience of the Web site.	**2.13.3** Determine information and audience requirements for a site, including,

	stakeholders such as customers, employees, shareholders, suppliers.
WD 2.1.4 Evaluate Web page design and layout with attention to the effective use of space, balance, symmetry, and color.	**2.3.4** Evaluate Web page design and layout.
WD 2.2.1 Explain the need for developers to create and maintain HTML/XHTML script.	**2.1.2** Identify the format and various versions of HTML, including: HTML 4.01, Extensible HTML (XHTML)
WD 2.2.2 Plan a basic HTML/XHTML document considering subject, audience, layout, color, links, and graphics.	**2.13.4** Document a Web site plan
WD 2.2.3 Utilize HTML/XHTML tags that display and format web content to create a basic page in a text editor (<html>, <head>, <title>, <body>, </html>, </head>, </title>, </body>)	**2.9.2** Create a Web page using the XHTML 1.0 standards.
WD 2.2.4 Utilize HTML/XHTML attribute tags	**2.1.3** Use HTML tags to format paragraphs and text.
WD 2.2.5 Create an ordered/unordered list utilizing HTML , ,	**2.1.3** Use HTML tags to format paragraphs and text.
WD 2.3.1 Insert and align graphics using the <img src=…>	**2.2.2** Identify the uses and benefits of various graphical file formats, including: GIF, GIF89, JPEG, PNG.
WD 2.3.2 Resize a graphic image using the HEIGHT and WIDTH attributes.	**2.2.5** Perform advanced image formatting techniques. **2.2.1** Incorporate graphical images into HTML pages.
WD 2.3.3 Realign images that will affect the text layout of a document	**2.2.3** Add lines, colors and tiled background images to HTML pages
WD 2.3.4 Explain the concept of an image map	**2.2.4** Create and link client side image maps
WD 2.3.5 Create an image map for a given graphic	**2.2.4** Create and link client side image maps
WD 2.3.6 Insert audio into a document by linking an image to an audio file	**2.2.5** Perform advanced image formatting techniques.
WD 2.4.1 Differentiate between absolute and relative linking to other documents **WD 2.4.2** Link to other Web sites utilizing the , tag **WD 2.4.3** Link to other HTML documents using the , **WD 2.4.4** Create a target/anchor that links to another section of the same document <a name=…>, **WD 2.4.5** Link one Web page to another Web page by clicking a graphic image utilizing a combination of the , , with <img src=…> **WD 2.4.6** Create e-mail links	**2.1.4** Create HTML hyperlinks for text, images, local files, and remote sites. **2.2.4** Create and link client-side image maps. **2.14.4** Manage existing sites (e.g., remove dead links and/or upgrade connectivity when necessary).

WD 2.5.1 Diagram and construct a table **WD 2.5.2** Write the code to insert a table in a document using \<table\> **WD 2.5.3** Construct a table using the \<tr\> and \<td\> tags to create rows and columns in a document **WD 2.5.4** Utilize the ROWSPAN and COLSPAN attribute on a document **WD 2.5.5** Apply BORDER= attributes to a table **WD 2.5.6** Control the dimensions of a table by utilizing the align attributes. **WD 2.5.7** Align text in a table utilizing the ALIGN= attribute	**2.1.5** Design and format tables to present information in an organized way.
WD 2.6.1 Compare/contrast the usage of frames.	**2.7.6** Evaluate the benefits of using frames in a site, and determine appropriate use.
WD 2.6.3 Identify the purpose of and the tags \<frame\>, \<frameset\>, and \<noframes\>	**2.5.1** Identify the purpose and use of the \<fram\> and \<frameset\> tags **2.5.2** Discuss the purpose of and use the \<noframes\> tag.
WD 2.6.2 Design and format a Web page using various frame layouts including, banner, navigation bar, and main document window	**2.5.3** Target HTML frames. **2.5.4** Create Borderless frames. **2.5.5** Identify the purpose of the \<iframe\> tag.

WD 2.7.1 Discuss the concept of a form on a Web document and the various tags that can be contained within the form
WD 2.7.2 Design a basic form from given specifications utilizing a variety of input controls (e.g. text entry fields, radio buttons)
WD 2.7.3 Write code for the following
   • Test entry field
   • Radio button
   • Check box button(s)
   • Pull-down menu
   • Scroll box
   • Submit/reset button
WD 2.7.4 Code default values for all input tags
	2.4.1 Construct and test HTML forms

WD 2.7.5 Distinguish between GET and POST methods to process collected data	**2.4.2** Identify ways that CGI scripts can parse and transmit information from a form using CGI, including: using e-mail, FTP, HTTP, HTTPS. **2.4.3** Diagram a fundamental CGI session.
WD 2.8.1 Test site/application after content is updated to ensure integrity	**2.12.1** Test and validate Web documents.
WD 2.8.2 Test Web sites on different browsers,	**2.12.3** Test Web pages in multiple browsers

platforms, and screen resolutions	**2.12.2** Estimate download time for Web pages
WD 2.8.3 Verify compliance of Web pages with governmental and industry accessibility standards.	**2.7.3** Verify compliance with governmental and industrial accessibility standards, including: W3C Web Accessibility Initiative (WAI), U.S. Governmental Section 508, and American with Disabilities Act (ADA).
WD 2.8.4 Perform updates in a timely manner	**2.14.5** Remove old sites and pages
WD 2.8.5 Update and review links.	**2.14.4** Manage existing sites (e.g. remove dead links and/or upgrade connectivity when necessary.
WD 2.8.6 Log all update activities	**2.12.4** Document results of Web site functionality testing
WD 3 Graphics development	
WD 3.1.3 Compare and contrast the uses and benefits of various graphic file formats (e.g. gif, Png, jpeg, jpg, bmp, tiff)	**2.2.2** identify the uses and benefits of various graphic file formats, including gif, gif89, jpeg, and png. Distinguish among other formats, including tiff, bmp.
WD 3.1.2 Use free downloadable or existing clipart and convert them to appropriate Web format and size	**2.2.1** incorporate graphical images into HTML pages.
WD 3.1.3 Demonstrate the impact of color combinations to various audiences and cultures.	**2.3.1** Define the Web-safe color palette. **2.3.2** Identify ways that color affects the principles of line, value, and form in Web pages. **2.3.3** Identify and demonstrate the impact of color combinations to various audiences and cultures.
WD 3.1.4 Create transparent and animated GIFs **WD 3.1.5** Edit, crop, and resize existing clipart files **WD 3.1.6** Edit, crop, and resize existing. photographs from scanner and/or digital camera. **WD 3.1.7** Optimize and export graphics to improve Web page loading time. **WD 3.1.8** Utilize proper typography in relation to graphical creation	**2.2.5** Perform advanced image-formatting techniques.
WD 4 Management and communication	
WD 4.1.1 Serve as a team member and/or project manager to develop Web projects.	**2.13.1** Work as a team to develop pages and sites. **2.13.2** Collaborate with technical (e.g., IT) and non-technical (e.g., marketing) members of the organization to ensure sites meet requirements.
WD 4.1.2 Maintain and modify an existing Web	**2.13.4** Document a Web site plan.

site utilizing a plan.	**2.13.5** Communicate the Web site plan effectively, both orally and written. **2.13.6** Obtain and document feedback, then improve the site, including; working closely with sales and marketing to evaluate the site effectiveness.
WD 5 Legal Issues and Ethics	
WD 5.1.1 Demonstrate effective and ethical ways to search for, communicate, and transfer information using Internet technology. **WD 5.1.3** Explain the differences of software copyright, such as freeware, shareware, and public domain.	**2.14.1** Define legal issues related to a Web site, including: trade marketing, licensing, copyrighting process, copyright infringement and consequences.
WD 5.1.2 Apply proper copyright laws in all Web-related projects.	**2.20.1** Obtain proper permission from developers when repurposing content (e.g., other developers code, images, concepts).
WD 5.1.4 Describe personal safety issues of Internet use, including viruses, and personal identity issues.	**1.6.5** Identify Spam, and create client-side filters to combat it. **1.10.1** Define three major types of encryption. **1.10.2** Identify ways that authentication, digital certificates, encryption, and firewalls provide Web security. **1.10.3** Identify ways that encryption helps enforce data confidentiality, data integrity and non-repudiation to secure end-user transactions. **1.10.4** Describe a computer virus and explain how to protect your computer from virus attacks. **1.10.5** Explain the functions of patches and updates to client software and associated problems, including; desktop security, virus protection, encryption levels, Web browsers, e-mail clients. **1.10.10** Distinguish between a virus and a worm. **2.16.5** Identify the importance of SSL/TSL to a transaction that contains sensitive information.
WD 5.1.5 Adhere to corporation computer use policy(s).	**2.20.2** Create and sign a Non-Discloser Agreement (NDA) when necessary. **2.20.3** Identify situations in which it is necessary to consult with a legal team. **2.20.4** Identify ethical concerns when

	developing a Web site.
WD 5.1.6 Evaluate the validity of information on Web sites.	**1.12.1** Evaluate resources and verify factuality.
WD 6 HTML Editing Software to Create and Maintain Web Pages	
WD 6.1.1 Create Web pages using commercial Web design software using content standards 2.2 through 2.8 **WD 6.1.2** Convert and import a Word, Excel, or PowerPoint document into a Web page	**2.11.1** Evaluate a GUI HTML editor according to the W3C Authoring Tool Accessibility Guidelines. **2.11.2** Validate HTML code. **2.11.3** Use font and page appearance options in a GUI HTML editor. **2.11.4** View source code and preview Web pages in a browser. **2.11.5** Create HTML tables using a GUI HTML editor. **2.11.6** Publish (i.e., upload) Web pages and sites to a Web server.